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Investigating the Psychological and Emotional Dimensions in Instructed Language Learning: Obstacles and Possibilities

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Abstract

In this article I put forth the core argument that Second Language Acquisition (SLA) needs to account for the psychological and emotional dimensions of second language (L2) learning, but that a number of epistemological and methodological difficulties must be surmounted before this new research program can be a reality. To illustrate my arguments, I examine in depth 2 research programs developed by my colleagues and me over the last decade: research on extraversion as a psychological variable investigated within the tradition of individual differences in SLA, and research on the expression of emotion in the L2. Throughout the article, I argue against research isolationism and for more interdisciplinarity in the field of instructed SLA. I contend that research on instructed SLA would benefit from an increased methodological and epistemological diversity and that a focus on affect and emotion among researchers might inspire authors of teaching materials and foreign language teachers to pay increased attention to the communication of emotion and the development of sociocultural competence in a L2.

In this article, I argue in favour of a general broadening of the theoretical and methodological horizons in the field of instructed Second Language Acquisition (SLA) by including the psychological and emotional dimensions of second language (L2) learning in our research programs. I am convinced that the field needs not only more breadth but also more depth and detail. With increasing breadth, we would see studies that take into account a larger number of relevant independent variables—quantitative or qualitative—than are usually included in studies on instructed SLA. More depth and detail would be attained in the field of instructed SLA if we saw studies featuring samples that were sufficiently large with complete reports of means, standard deviations of relevant variables, and a detailed description of the population, the experimental procedure, and the variables (cf. Grosjean, 1998), including relevant psychological variables not usually reported in the SLA literature. This broadening implies that findings in specific subfields should be communicated to the wider SLA community through presentations at general conferences and publications in journals with a wide focus. SLA researchers need to be aware of developments in contiguous areas that might benefit their own research. An awareness of the psychological research on individual differences, for example, may help to get rid of the monolithic view of the prototypical faceless learner, whose identity often disappears in gross group averages. This article is organized as follows. The first part deals with a number of methodological and epistemological issues surrounding instructed SLA research. I defend the view that the best way forward in SLA is through a mixed focus on individual learners as well as on groups using appropriate research designs. I argue that research in L2 learning would benefit from broadening the cultural and sociodemographic pool of participants and from combining quantitative and qualitative research. I also warn against research isolationism and call for more interdisciplinarity in the field. The second and third parts of the article provide illustrations of the previous points by referring to two growing areas of research in SLA in which my colleagues and I have been involved for some time now, namely the study of extraversion and other psychological variables as sources of individual differences in L2 learning and the study of the expression of emotion in a L2. In the final part of the article, I point out that research in the language of emotion and the ability to express affect and interpersonal language functions in general has important implications for L2 teaching. I also raise some ethical questions about the inclusion of highly emotional vocabulary in the curriculum and the L2 users' freedom to deviate from sociopragmatic norms in the L2. Before venturing into my discussion, however, two important points need to be made about definitional issues of the research domain of affect and emotion in SLA and the personal and professional affiliations and incentives I bring to this article.

With respect to the first point, it is important to realize that the domain of affect and emotion in SLA is situated at the crossroads of sociolinguistics, sociopragmatics, intercultural pragmatics, cognitive linguistics, social psychology, cognitive psychology, and cultural psychology. There is inevitably a certain overlap between key concepts in these disciplines. For example, for Barron (2003), pragmatic competence is based on three types of knowledge: "knowledge of the linguistic resources available in a given language for realizing particular illocutions, knowledge of the sequential aspects of speech acts and finally, knowledge of the appropriate contextual use of the particular languages' linguistic resources" (p. 10). Kasper and Rose (2001) emphasized the latter type of knowledge in their definition of sociopragmatic competence: "the social perceptions underlying participants' interpretation and performance of communicative action" (p. 2), as did Lyster (1994) in his definition of sociolinguistic competence: "the capacity to recognize and produce socially appropriate speech in context" (p. 263). Dewaele and Pavlenko (2002) added a focus on nonverbal communication in their definition of sociocultural

competence, that is, the ability “to identify, categorize, perceive and engage in verbal and non-verbal behaviors similarly to other members of a particular speech community” (p. 268). The slightly overlapping concepts reflect the fact that many SLA researchers combine the different approaches, while also adopting aspects of interlanguage pragmatics or intercultural communication.

Second, because a writer’s and scholar’s views are shaped by professional and personal experience, it is important for readers to know the background of this writer. I would like to define myself professionally as a European SLA researcher and a foreign language teacher who is concerned by both dimensions equally. I studied, taught, and did research in universities in Brussels and London. I am aware that my educational setting has influenced my views on teaching and research. I consider them as two sides of the same coin. Therefore, in the last part of this article I will argue that good research into SLA is crucial for the development of good teaching practices. If not much research is available, then not only do we not have enough knowledge to go on in terms of designing materials or curricula, but also the legitimacy of such language areas as worthy of teaching remains problematic.

METHODOLOGICAL AND EPISTEMOLOGICAL OBSTACLES

The Tension between Groups and Individuals in SLA Research

Historically, research on instructed SLA seems to have focused on groups rather than on individuals. This focus on groups could be linked first to a purely practical fact, namely that teachers and researchers typically face groups of learners in their language classes and involve them in their experiments. They typically test the effect of different teaching techniques with different groups. The second possible historical reason for privileging groups rather than individuals may be traced to the Chomskyan notion of the ideal native speaker. In that perspective, individual differences do not matter. The researcher is interested in what groups of participants have in common rather than in what makes the participants unique. A problem that should not be lightly dismissed is that considering broad group averages is a way of constructing faceless average learners. The danger is that in the quest for easy generalizations, one may lose sight of individual learners, with their unique cultural, linguistic, psychological, social, and cognitive characteristics, 369 who function within well-determined sociocultural contexts.

Postmodernist researchers make an important contribution to the development of new insights in our field when they criticize the mainstream empiricist SLA approach and refuse to see learners as mere bunches of variables. They reject the static and homogeneous character of categories such as gender, age, ethnicity, and social class and focus instead on issues of personal identity and L2 socialization (Belz & Kinginger, 2002, 2003; Pavlenko, 2002). They are less interested in the acquisition process within the classroom walls than in the usage of that new language knowledge outside school in authentic interactions with target language speakers. In other words, they focus on how a particular learner develops his or her understanding of a target language through participation in relevant social interaction, where issues of personal identity are at stake (Belz & Kinginger, 2002).

For example, Belz and Kinginger (2003) stated in their study on pronouns of address in French and German: “learning to use these forms and to understand their meaning is as much a function of language socialization as of language acquisition” (p. 208). The focus on the actual authentic use of the L2 by the learner involves a shift in perspective (Cook, 2002). Indeed, a L2 *learner* is also a legitimate L2 *user*,

a person who knows and uses a second language at any level. One motivation for this usage is the feeling that it is demeaning to call someone who has functioned in an L2 environment for years a “learner” rather than a “user.” A person who has been using a second language for twenty-five years is no more an L2 learner than a fifty-year-old monolingual native speaker is an L1 [first language] learner. (p. 4)

The learner is not only an object of scientific curiosity, but also a crucial witness of his or her own learning process. Interviews with students after their study abroad (Evans, 1988; Kinginger & Farrell, 2004) highlight important differences in self-reported social behavior of language students during their stay abroad. Although some students use every opportunity to engage in conversations with native speakers of the target language, others avoid contact outside their own linguistic community. This difference in behavior might account for the wide interindividual variation in the amount of linguistic progress after such a stay abroad (cf. Regan, 2004; Towell & Dewaele, 2005) and in the amount of metapragmatic awareness the students gained through interactions with native speakers of the target language (Kinger & Farrell, 2004). In other words, by carrying out detailed qualitative research on a limited number of participants, patterns can be uncovered that could help in the interpretation of quantitative research findings on larger population samples.

The Quantitative–Qualitative Divide

One can see merit in these crucial arguments without rejecting empirical quantitative research methodologies. Much to the contrary, although I agree with postmodernist researchers that L2 learners and users are much more than just bunches of variables, I still believe that rigorous quantitative analyses of these various variables can help researchers obtain a more complete picture. My own theoretical basis is personality psychology and quantitative sociolinguistics. However, these paradigms may miss some of the phenomena uncovered by postmodernists.

I believe a good alternative to a forced choice between quantitative and qualitative instructed SLA research is triangulation, that is, the use of a combination of different research methodologies in order to answer common research questions. In this approach, empirical and quantitative accounts can be combined with an emic perspective, or participant-relevant view, “as a result of which the L2 learners’ and users’ voices and opinions are heard on a par with those of the researchers” (Pavlenko, 2002, p. 297). Pavlenko also defended the idea of triangulation:

I argue that poststructuralist studies, which see L2 learning as a process of socialisation rather than creative construction or interlanguage development, provide new ways of framing the interaction between social contexts and learning processes, which can productively be combined with more linguistically and cognitively oriented interactionist approaches in SLA. (p. 291)

Indeed, there is growing acceptance within the SLA community that learners’ feelings and reflections on their learning process, language use, and changing identity offer valuable insights in aspects traditionally overlooked in SLA. It would be impossible for every study to combine the different approaches. However, editors of books or special issues on a specific theme could ensure that a variety of perspectives are represented.

Limits to Interpretation and Generalization in Quantitative SLA Research

Although every language learner is unique, learners from a given background and context share, to varying degrees, interacting psychological traits, social, cultural, and biographical characteristics which can be linked to individual differences in development, production, and perception of a L2. This general statement guides quantitative research programs into individual differences in instructed SLA. Several caveats need to be raised, however, concerning the interpretations that can be legitimately based on such research, and the power of quantitative researchers like me to produce generalizations about psychological variables and individual differences in L2 learning.

First and foremost, the outcome of any research will be dependent on the population involved in the research. Participants in SLA studies are typically young adults enrolled in the universities where the researchers work. They may therefore not be representative of other populations in terms of ethnic or linguistic background, age, ability, and so on. It is clear that more varied samples of participants representing a wide variety of backgrounds and language combinations would strengthen the validity of the findings gleaned by quantitative programs in psychologically oriented SLA research, which, of course, aspire to generate universal explanations about human psychological traits.

Another concern is that research on individual differences usually considers only one L2, but the authors often implicitly assume that their findings apply to foreign languages in general (e.g., Horwitz, 1986). Yet, complex interactions between independent variables may have different effects in different foreign languages. For example, in a study on foreign language anxiety among 100 Flemish high school learners of French L2 and English as a third language (L3), I discovered that the participants’ social class was a strong predictor of their level of foreign language anxiety in French L2 while their degree of extraversion, neuroticism, and psychoticism did not have a significant effect. The latter three psychological variables did however predict the level of foreign language anxiety in English L3, while the effect of social class was absent (cf. Dewaele, 2002a). The individual differences observed in the data had clearly been affected by the local sociohistorical context. Researchers need to be aware that the patterns they are observing may be influenced by independent variables lurking in the background. It is, of course, undesirable to include too many independent variables in a single study, given that they may overly complicate the research design.

A third source of difficulty in quantitative research on psychological and emotional variables in L2 learning resides in the simplicity of some designs. Study abroad programs, for example, which figure prominently in European university curricula (e.g., Erasmus and Socrates exchange programs),¹ have provided researchers with ready-made research designs: (a) A sample of students performs tests or interviews allowing the researcher to calculate values for specific variables at “time 1”; and (b) a subsample of students leaves the home institution to study in the L2 environment, while the others continue their study at home. Both groups are tested again when they are reunited after a number of months (“time 2”), and averages for both groups on the same tests and interviews are compared. The difference is then attributed to the *study abroad effect*. There may be some methodological problems in such designs because it is assumed that the group who stays at home has no extra exposure to the target language outside the language classes. Yet many determined home-staying language learners may achieve similar levels of exposure to the target language through access to the media, films, and satellite television. Moreover, large cities have increasingly multilingual and multicultural populations, allowing the motivated language learner to practice the language with native speakers of the target language. Cities like Brussels, Paris, London, and Amsterdam, for example, have sizable populations of foreign language speakers with their own cultural centers and meeting places. Film lovers in these cities can watch foreign films in their original versions. In other words, a language learner in a metropolitan city who is prepared to make an extra effort can come into contact with a foreign language without having to leave his or her home country. Researchers in study abroad projects typically rely on empiricist quantitative analyses (but see also Kinginger, 2004a). The resulting view of the learner is thus rather monolithic, namely that of an “average language learner” in a certain teaching/exposure

condition. I am certainly not claiming that such an approach does not provide rich insights, only that by considering groups that may be heterogeneous in many other ways, individual differences tend to be ironed out.²

Finally, difficulties regarding technical expertise in quantitative SLA research ought to be acknowledged. Certain common research techniques, such as statistics, have become widely used. However, given that SLA researchers (myself included) are often autodidacts in statistics, a great deal of the research lacks methodological rigor, is based on small samples (cf. Lazaraton, 2000; Norris & Ortega, 2000) or relies on extremely simple designs, where one single independent variable is correlated with one single dependent variable (cf. Dewaele, 1993).³ Complex research designs require more advanced statistical techniques. Multivariate analyses and regression analyses are increasingly used more widely. They provide SLA researchers with not only significance values (p) for specific relationships but also effect sizes (e.g., eta squared) for multiple variables. More sophisticated statistical techniques, such as path analysis,⁴ have been used successfully in SLA to determine the effect of multiple independent variables on a single dependent variable (MacIntyre & Charos, 1996). The debate on the use of statistics within SLA is situated within a wider discussion on the merits of various methodologies that belong to specific paradigms. Indeed, some researchers remain skeptical about the usefulness of statistics and quantitative research methods for the study of language. This view is reflected by the French linguist Milner (1989) who argued that “*aucune proposition importante de la théorie linguistique n’est fondée sur le décompte* (not a single important proposition in linguistic theory is based on counting)” (p. 586).

The Need for Interdisciplinarity

Although SLA was spawned by various disciplines such as child language, linguistics, language teaching, Creole studies, and psychology, it has evolved into a field with relatively closed competing paradigms. Researchers within these paradigms tend to avoid concepts and methodologies from neighboring disciplines that could potentially enrich their own perspectives. For example, Universal Grammar-inspired studies on agreement in the L2 rarely make more than a passing reference to psycholinguistic research outside the Universal Grammar perspective (cf. Bruhn de Garavito & White, 2002). When concepts from contiguous research areas are introduced in SLA, they are often viewed with suspicion or plainly misunderstood (as was the case with the dimension of extraversion, to be discussed in the next section). In my view, there is often insufficient tolerance for or interest in other approaches imported from other equally legitimate outside fields and schools. Some readers may consider my assertion here as overly generalized, and they may even object that I am without hard evidence to back up my claim. Yet, intolerance can be subtle but nevertheless experienced at many levels of our scholarly endeavors. For example, the rejection of an abstract for a conference can always be motivated by a lack of quality rather than diverging theoretical views.

Public debates among SLA researchers are healthy, but sometimes the general perspective is lost. The ongoing debate on the primacy of sociolinguistic approaches versus psycholinguistic approaches (e.g., Firth & Wagner, 1997) is a good case in point. In my opinion, this debate obscured the fact that individual learners, like bilinguals (cf. Grosjean, 1989; Kecskes & Papp, 2000), are more than the sum of their parts. Just as the movement of legs is insufficient to explain the phenomenon of walking, no single sociobiographical or psychological characteristic of the learner can account for the speed and “success” of the language learning process and of the actual speech production. L2 acquisition is an extremely complex process; we need to abandon the dream of representing a learner’s progress in a gently upwards line toward native-like status. It is equally unworkable to try to fit every learner into a single well-defined category and make simplistic predictions about his or her linguistic development. Dörnyei (2001) showed that highly motivated learners may be less motivated than usual to carry out a specific task. Similarly, a learner who usually has a low level of motivation may suddenly fall in love with a poem, a film, a song, or a speaker of the L2, resulting in a shift in attitude and concomitant progress. The early realization that interlanguage development is dynamic and nonlinear (Larsen-Freeman & Long, 1991) has been better understood and substantiated in more recent research such as that by Herdina and Jessner (2002) and innovative theories such as van Lier (1996) and Larsen-Freeman’s (1997) application of chaos theory to the language classroom and L2 acquisition processes. Subsystems of the interlanguage do not necessarily progress smoothly toward a target-like norm. They can display U-shaped progression patterns before reaching equilibrium points. If the system displays nonnative use for a prolonged period, it will be labeled as being “fossilized” (Han, 2003), but random events or teacher intervention may push the system out of its equilibrium and upwards towards native speaker norms. In sum, language learners or users are constantly bombarded by events that continuously shape and reshape their personalities and identities, resulting in linguistic progress, stagnation, or loss. It is an illusion to hope that all the independent variables can be controlled in SLA studies. A multitude of potentially interacting situational, social, psychological, cognitive, neurobiological, but also cultural and ideological factors determine—to a variable extent—the learning process, the production, and the comprehension of the foreign language(s).

THE PSYCHOLOGICAL DIMENSION IN SLA: EXTRAVERSION AND OTHER SOURCES OF INDIVIDUAL DIFFERENCES

An examination of the ways in which SLA researchers have approached extraversion as a L2 learning variable provides a telling illustration of the obstacles and concerns laid out in the previous section. Research on extraversion and L2 learning is also a case in point particularly relevant to my call for interdisciplinarity.

SLA researchers interested in individual differences can learn substantially from psychologists.⁵ Several journals in psychology include the collocation *individual differences* in their titles, while to the best of my knowledge such a journal does not exist in the field of SLA. As I started my doctoral research in the early 1990s, I became aware of a relatively strong skepticism among applied linguists towards psychological variables. I was particularly surprised because psychological research into individual differences in the performance of complex (nonverbal) cognitive tasks seemed to be focusing on phenomena that were equally relevant for L2 production. The number of linguistic studies that included psychological variables was relatively limited and most of these dealt with motivation (cf. Skehan, 1989). I set up a research design that combined concepts from personality psychology, applied linguistics, and bilingualism and focused on interpersonal communicative processes in French interlanguage. One personality variable, namely extraversion, was found to correlate significantly with temporal variables in participants' speech recorded in a stressful situation. A bibliographical search showed that very few SLA researchers had investigated the effect of extraversion on L2 production.

In my search for possible reasons for this lack of attention, I found the widely cited study of the "good language learner" by Naiman, Fröhlich, Stern, and Todesco (1978), who included extraversion in their research design but later dismissed the instrument to measure it, the Eysenck Personality Inventory (EPI). This exclusion led to a rejection in SLA circles of a perfectly valid and robust psychological dimension as an independent variable. Applied linguists have been interested in psychological dimensions insofar as they are predictors of success in language learning (i.e., error-free production and reception). Only one of the so-called "Big Five" personality dimensions⁶ has a strong *prima facie* link with language learning, namely the extraversion/introversion dimension.

Naiman et al. (1978) collected written data through a questionnaire on French as a Foreign Language developed by the International Association for the Evaluation of Educational Achievement (IEA). The questionnaire included a Listening Test of French Achievement and an Imitation Test. Samples were culturally homogeneous groups of 72 Canadian high school students from grades 8, 10, and 12 learning French as a L2. The authors claimed that these three levels were representative of three levels of proficiency: beginner, intermediate, and advanced. The aim of the researchers was to establish the psychological profile of the good language learner, in other words, the participants with the highest test scores. One of their hypotheses was that the good language learner would be more extraverted. This hypothesis was based on self-reports from good language learners reported by Naiman, Fröhlich, and Stern (1975) where nearly a third of the participants mentioned that being more extraverted was an asset in foreign language learning. When this hypothesis was disconfirmed by the data in the 1978 study (Pearson correlation values ranging from $-.11$ to $-.13$; see p. 67), the authors questioned the construct validity of the independent variable (the score on the introversion/ extraversion dimension) rather than their dependent variables or their research design: "the constructs these tests were supposed to be measuring were in fact not being adequately measured by these tests" (Naiman et al., 1978, p. 67). In other words, they refused to believe that a high score on the extraversion scale indicated that a student was in fact an "extravert" in the language classroom (p. 67). This particular remark has been widely cited in applied linguistic research and has had a devastating effect on the reputation of the extraversion variable (Dewaele & Furnham, 1999).

Indeed, in psychology, the psychometric validity of the EPI has hardly ever been questioned since it was first developed. Some applied linguists have expressed their doubts about Naiman et al.'s (1978) conclusions, but these doubts seem to have passed largely unnoticed. McDonough (1986), for example, observed:

It may have been the case that their criterion measures were simply not sensitive to the relevant kinds of performance. . . . It seems plausible that extroverts are more likely to perform better on tests of oral proficiency than on tests of imitation or listening comprehension. (p. 139)

Larsen-Freeman and Long (1991) also questioned Naiman et al.'s (1978) conclusions and the choice of dependent variables: "While all of these [measures] may be valid in their own right, none of them may provide a global measure of language proficiency" (p. 185). In our study (Dewaele & Furnham, 1999), we reviewed 33 SLA studies that had included the extraversion variable, and we discovered that no systematic relationships were ever found between extraversion scores and linguistic variables or test results based on written material. Significant correlations were found in studies that used linguistic variables extracted from oral language. The strength of the relationship was found to depend on the task that the speaker was asked to perform. Correlations between extraversion and linguistic measures were much higher for complex verbal tasks than for simple ones, especially when the complex tasks were executed in stressful situations such as oral exams. No significant differences in linguistic accuracy existed between extraverts and introverts. It is very likely that if Naiman et al. (1978) had used a wider variety of more sophisticated linguistic variables, covering not only written language but also communicative oral language, they might have found that the construct validity of the EPI was not to blame for the lack of expected correlations.

Dewaele and Furnham (2000) carried out an empirical analysis of oral fluency indicators in French interlanguage and explored possible underlying causes of the better performance of extraverts than that of introverts. One such potential cause is the extraverts' superior capacity in short-term memory, allowing them to maintain automatic speech production in stressful situations. Lieberman and Rosenthal (2001) suggested that extraverts' superior short-term memory capacity makes them more able to engage in multitasking and thus able to engage in nonverbal decoding when it is a secondary task. This ability to gauge the reactions of interlocutors contributes to the extraverts' superior social skills. Referring to this study by Lieberman and Rosenthal (2001), I speculated

(Dewaele, 2002b) that levels of dopamine and norepinephrine,⁷ which are vital in attentional and working memory processes, might exceed optimal levels more easily in introvert than in extravert L2 users. Such excess could cause an overload and a breakdown in fluency. These dopamine levels seem to remain under the maximum threshold in extravert L2 users. As a consequence, extravert L2 users suffer little disruption in the functioning of the short-term memory and minimal reduction in fluency. Another crucial aspect of the problem is that introverts tend to suffer more from communicative anxiety than extraverts, especially in stressful situations. This anxiety is linked to catecholamine activity,⁸ and norepinephrine in particular, which also seems to affect the capacity or efficiency, or both, of the short-term memory. The combination of high anxiety and high introversion thus reinforces the effects on speech production in the L2, especially in stressful interpersonal situations.

In sum, I wanted to demonstrate that this particular psychological variable, extraversion, has been unloved in the SLA community for the wrong reasons. Researchers who developed appropriate research designs found that extraversion is a good predictor of fluency in oral L2 production (cf. Berry, 2004; Wakamoto, 2002). Moreover, this particular psychological variable allows the researcher to dig deeper into the neurological substrate of oral L2 production, opening up unexplored avenues of investigation in SLA.

THE EMOTIONAL DIMENSION IN SLA: COMMUNICATION OF EMOTION BY MULTILINGUALS

My second illustration provides a more optimistic perspective on the benefits of interdisciplinarity and triangulation in SLA research. It relates to a research program in the communication of emotions in a multilingual context that my colleague Aneta Pavlenko and I are currently engaged in developing. This topic is situated at the intersection of linguistics, pragmatics, cognitive, social, and cultural psychology, anthropology, and SLA.

A majority of cognitive psychologists agree that emotion is essential to human cognition (Harris, Gleason, & Ayçiçeği, in press; Panksepp, 1998). This view is slowly gaining ground in SLA research, but, to my surprise, the emotional dimension is largely absent in research in interlanguage pragmatics, where the focus is much more on well-defined and relatively short speech acts such as requesting information, complaining, apologizing (Barron, 2003; Kasper & Rose, 2001; Lyster, 1994). Is there a reason why interlanguage pragmaticists shy away from elusive concepts of subjective experience and emotion? Could this focus on specifically circumscribed speech acts explain the emphasis in L2 teaching material on the same formulaic, practical speech acts? Might a shift in research focus result in concomitant change in L2 teaching practice?

My interest in the communication of emotions in a L2 was spurred by the finding that the 374 proportion of emotion words is smaller in speech extracts of L2 users than in those of native speakers engaged in similar tasks (Dewaele & Pavlenko, 2002). Using Pavlenko's corpora of film retellings in English L1, English L2, and Russian L1, and my corpus of conversations in French L2, we found in that study that participants underused emotion vocabulary in their L2. We found that the proportion of emotion vocabulary was linked to the type of linguistic material, level of proficiency, degree of extraversion, and—in most corpora—to gender, with female participants producing a larger proportion of—and a greater diversity of—emotion words. The phenomenon of underuse of emotion vocabulary in the L2 seemed to be linked to the detachment effects in the L2 described in the literature on bilingualism: The L1 is preferred to express emotional involvement whereas the L2 is experienced as colder, more distant, and more detached from the L2 user and less appropriate for the expression of emotions (Kinginger, 2004b; Pavlenko, 1998). Underuse of emotion vocabulary also seemed to fit with findings in research into autobiographical memory where recall of emotional events in the L1 was found to be usually more vivid and intense than recall in the L2 (Schrauf, 2000). Similarly, in psychological research on the emotional impact of words in the L1 and L2 of bilinguals through their effect on autonomic reactivity, it appeared that physiological reactions to taboo words and childhood reprimands presented in the L1 were much stronger than their translation equivalents in the L2 (Harris, Ayçiçeği & Gleason, 2003).

In order to approach the expression of emotion in the L2 from a different angle, Pavlenko and I set up an online questionnaire aimed at multilinguals, the results of which proved fruitful. The questionnaire contained 35 questions concerning emotional and non-emotional language use in different situations in up to five languages. It included questions on social, demographic, and linguistic background and questions on the relationship between languages and emotions. The closed questions allowed the gathering of numerical data through the use of Likert scales and permitted further statistical analysis. Five open questions at the end of the questionnaire invited participants to comment on (a) the weight of the phrase *I love you* in the participants' respective languages, (b) their linguistic preferences for emotion terms and terms of endearment, (c) the emotional significance of their languages, (d) the language of the home and language in which they argue, and (e) the ease or difficulty of discussing emotional topics in languages other than the first. The questionnaire has been completed by 1,459 multilinguals with 77 different L1s. The data elicited through the open questions yielded a corpus of about 150,000 words.

The advantages of using an online Web questionnaire are that it allowed us to gather data efficiently from a very large sample of learners and long-time users of multiple languages from across the world and from a wide age range, in other words, not only the 18–22 year-old participants who are predominantly used in empirical research in applied linguistics and psychology. This approach is not without its own methodological limitations (cf. Pavlenko, 2002). The most serious limitation is respondent self-selection. To fill out the questionnaire, participants needed access to the Internet and a certain degree of metalinguistic awareness. It turned out that our sample had a

high proportion of female participants (71%) and that the participants were generally highly educated (31% with a MA, 30% with a Ph.D.). We could not therefore claim that our sample was representative of the general population, but it did allow us to uncover some interesting trends.

The first studies based on this database have been published recently. In my first study (Dewaele, 2004a), I investigated language choice for swearing and found that the multilingual's dominant language (often the L1) was used most frequently. An early start in the learning process and high frequency of use of a language were found to be strong predictors for swearing in that language. In a second study, I analyzed variation in the perceived emotional force of swear words and taboo words in the multilinguals' different languages (Dewaele, 2004b). A comparison of mean scores in the different languages showed that, on average, the emotional force is highest in the L1 and gradually lower in languages learned later. Perception of emotional force of swear words and taboo words was also positively correlated with self-rated proficiency and frequency of use of a language. Participants who had started learning a L2 at a younger age tended to rate the emotional force of swear words and taboo words more highly in that L2 than learners who started language learning later. Strong correlations appeared between perception of emotional force of swear words and frequency of use of swear words in the different languages,⁹ suggesting that "As a rule, language users seem to avoid use of linguistic 'nuclear' devices if they are unsure about their yield" (Dewaele, 2004a, p. 102). The general preference for swearing in the L1 and the stronger emotional resonance of swear words in that language did not prevent participants from occasionally using their other languages, depending on the intended perlocutionary effects and the identity of the interlocutor. In another study (Dewaele, 2005), I focused on the effect of context of acquisition on language choice for swearing and perception of emotional force of swear words and taboo words in languages learned later in life. The results showed that instructed language learners used the target language less frequently and gave lower ratings on emotional force of swear words and taboo words in that language than did mixed learners (i.e., who had a combination of classroom instruction and naturalistic contact) and naturalistic learners (i.e., who had not benefited from any classroom instruction).

Pavlenko (2004) used the database to investigate the role of emotion-related factors in language choice in bi- and multilingual families. She found that "most of the time, factors other than emotions govern language choice and use in such families, among them language dominance, social context and linguistic competence of the interlocutors" (p. 179). Quantitative and qualitative analyses of the responses of 141 bi- and multilingual parents showed that "perceived language emotionality and affective repertoires offered by particular languages also play a role in language choice and use in parent/child communication, in particular in emotional expression" (p. 185). Although the quantitative analyses showed general trends, namely the superior emotionality of the L1 and the preference for that language to express emotions, the comments made by participants to the open questions in the online questionnaire alerted us to the fact that, for a minority of participants, adult L2 socialization had made other languages seem equally, or even more, emotional than the L1. This finding suggests that the higher emotional resonance of the L1 is not a law of nature but rather a reflection of averages. The multilingual's dominant language is usually the language of emotion, and, in our database, about 90% of the participants declared themselves to be dominant in their L1. We published these findings in two journal special issues (Pavlenko & Dewaele, 2004a, 2004b) to which scholarly "border-crossers" contributed. The aim was, as Wierzbicka (2004) explained in the preface to the second special issue,

to restore the balance between, on the one hand, "objective" and "scientific" study of language and cognition and on the other, a study open to the "soft data" of human testimonies and subjective experience, including experiential knowledge of bilingual persons. (pp. 103–104)

In sum, these two illustrations that I have discussed at length show that methodological and epistemological diversity can greatly benefit SLA research. As Crago (in press) eloquently put it: "The aim is to avoid a balkanization of thought by bringing ideas together that create transfer from one mindset and set of theories and practices to other ones." A wide knowledge of the SLA literature and a good understanding of relevant concepts in contiguous research areas allow SLA researchers to "catch" all the relevant variables for their study and help them avoid simplifications or overgeneralizations. It is equally important that their nuanced findings reach teachers and those in charge of language teaching methods. I will point to a number of implications of the research on affect and emotions for teaching in the following section.

THE L2 USER AS AN EMOTIONALLY COMPETENT COMMUNICATOR

I pointed out earlier that emotions are a crucial aspect of human mental and social life. Why then are they so conspicuously absent in foreign language teaching material—and, possibly as a consequence—so infrequent in L2 users' interlanguage (cf. Dewaele & Pavlenko, 2002)? Don't learners need to be able to express and recognize anger, sadness, shame, happiness in the L2? Moreover, because the vocabulary of emotions and emotion scripts are different from language to language, it seems doubly important to focus on the differences and similarities between the L1(s) and the L2.

Language teachers need to be aware that cultural/ typological distance between the learners' L1(s) and their L2 is an important obstacle in mastery of emotional speech. SLA research shows that learners from "distant" cultures experience significantly greater difficulties in identifying emotion in the L2 and in judging the intensity of that

emotion than do fellow learners from “closer” cultures with similar levels of proficiency. Being able to judge the interlocutor’s emotional state is crucial for successful communication (Rintell, 1984).

Emotion-free course books do not prepare L2 learners to become proficient L2 users. I personally remember feeling quite a fool when, at the end of a period of instructed learning of Spanish at the university in Brussels, I went to Spain only to discover that I was unable to produce anything but bland talk with my interlocutors. I could say something about the weather (*que calor* ‘it’s hot’), I could order *tapas*, and ask for directions, but I was unable to impress Spanish girls with my sophistication and wit, which mattered a lot to me at the time. I felt like a terrible bore, acutely aware of my lack of sociocultural and sociopragmatic competence. I tried in vain to recall anything from my course books that could constitute the basis of an interesting conversation. There was nothing. I did, however, discover some nice poetry when I was in Spain that helped me expand my emotion vocabulary. These texts, the *telenovelas*, and the encounters with Spaniards helped me develop a basic understanding of emotions in Spanish culture and how they can be displayed and verbalized. Should my Spanish teacher have warned me against the use of swear words? Should my course book have contained a list of swear words with ratings of their intensity? Should it have proposed a wider range of sentences to display one’s dis/satisfaction? These are difficult ethical questions. Just how much emotion-laden vocabulary and expressions should be taught to the learners? Should these words and expressions include the many synonyms referring to sexual anatomy and sexual behavior? What about words with racist connotations?

One could argue that knowledge of these words and expressions constitutes an essential part of sociocultural competence in the target language and that they should be taught with the necessary words of caution. However, the press and parent associations would probably lambaste the author of any course book that ventured into the dark underbelly of a target language. It is hard to imagine course books with the red warning sticker “offensive texts, not appropriate for under-18s.” Do we have to leave learners unaware of emotion-laden words and expressions and let them experience them through authentic interactions? Can we, as teachers, remain silent about a vibrant and crucial part of the target language and culture? I would argue that it is possible to prepare learners, to a certain extent, in the perception and use of emotional speech acts. One such method is through use of authentic material such as film extracts that can help to illustrate the combination of words with body language, vocal cues, gestures, common collocations, and so on (Planchenault, 2005). The other method is through a stay in the country where the target language is used. Evans and Fisher (2005) showed that even short exchange visits (up to 11 days) can lead to significant increases in the use of expressive language.

The argument about the teaching of emotion-laden vocabulary and expressions leads to a second ethical question that merits increased attention in SLA, namely learner resistance towards cultural assimilation and problems of cultural stereotyping on the part of both the learner and members of the host culture. In situations of instructed L2 learning, the teacher expects learners to acquire an interlanguage that will gradually approximate native speaker norms. This acquisition can be difficult when it involves the learner’s presentation of self and face. Users of L2s may be aware of the sociopragmatic and sociocultural norms of the target language, but they may decide that these norms are in conflict with their own beliefs and hence consciously deviate from the native speaker norm when they become L2 users. I am, for example, aware of the ambiguous nature of *piropos* in Spain. Some male Spanish friends describe *piropos* as friendly banter in which males express their admiration for the looks of a female; other friends, both male and female (depending on age, class, education, and political persuasion), find *piropos* unacceptable and offensive. Coming from a culture where this type of speech act is considered inappropriate, I would never utter a single *piropo* in Spain. Similarly, Ohara (2002) found that some of her participants, female American L2 users of Japanese, refused to conform to gender variation patterns in pitch level. They felt that the high-pitched voice Japanese women use in certain situations—because it is perceived to be more feminine and polite—did not conform with their own gender identities (see also Siegal, 1996). Conversely, some L2 users may overcome an initial unwillingness to conform to native speaker norms after realizing that an approach modeled on their L1 was unsuccessful. Evans (1988) quoted a British student who had spent a semester in Italy and declared:

The Italians are so different, and if they want something they will go out and get it. I’ve been taught that you ask for it politely. You realize that unless you do what they do, shout, nothing will come out of it. (p. 45)

In sum, more work is needed to improve our knowledge of how to promote the acquisition of the expression of emotion and other essential parts of L2 sociocultural competence. Instructed L2 learning includes not only the literal decoding of text and speech in the L2 but also the reading of the interlocutor’s face, an awareness of vocal cues, body language, and so on. If not much research is available in these areas, however, we do not have enough knowledge to go on in terms of designing materials or curricula, and the very legitimacy of such language areas as worthy of teaching remains problematic. Good research into the psychological and emotional dimensions of SLA is crucial for the development of good teaching practices.

CONCLUSION

I have argued in this article that to obtain a more complete picture of the language learner and user, we need to expand our current theoretical horizon. We need to understand what makes instructed L2 learners and L2 users behave the way they do, and we also need to accept that any answer can only be tentative. Communicative behavior may be influenced by cultural, social, or psychological variables which can be factored in any analysis,

but it is also largely linked to unquantifiable factors such as the users' free will and random events that might affect the language learning process. I am not arguing in favor of tearing down all the borders separating the different areas of SLA, or between SLA and its contiguous disciplines. That would be both utopian and impractical. A better solution, in my view, would be a loose confederation of research areas with porous borders that allow free circulation of research ideas and methodologies. There will always be enough space for academic border-crossers to plant new flags in "unclaimed territories." Debates among SLA researchers from different perspectives are crucial and the best guarantee against stagnation.

Two interesting epistemological questions hover over the different issues raised in this article: the deceptively simple question, Why is something there? and its more fiendish counterpart, Why is something absent? The second question is harder to answer because there is a presupposition that something ought to be there but is not, for some unknown reason. These questions can be asked about the synchronic variation in the learner's interlanguage (i.e., What external factors affect the presence or absence of an element?), and about the diachronic variation in the interlanguage (i.e., Why and when does an element appear?). The same question can also be asked about the discipline as a whole. Why have certain questions been researched? Why have certain independent and dependent variables been included in research designs? Does the absence or paucity of published work on certain variables mean that they have not been researched? Or might it suggest that they have been wrongly researched? Or have the researchers decided that the publication of inconclusive results was not worth the effort? These are fundamental questions facing anyone contemplating a research project in SLA, especially those starting their doctoral research, who naturally prefer not to come up with a null result after years of hard work.

My guess is that the answers to the two epistemological questions will vary according to the position of a researcher within a particular network. I assume that researchers at the center of the network share a larger set of common points of view and a longer common history than do those at the periphery. Those at the center tend to encourage work on questions where they can safely guess the answer. They may not welcome challenges to the very basis of their research area. The lack of an outside view means that researchers may remain unaware of their own prejudices. This lack of awareness does not stop them from doing excellent work, of course, but the seed of stagnation is present. My argument is that by stimulating interdisciplinarity and by encouraging cross-fertilization, we can ensure a healthy future for SLA. However, interdisciplinarity is not without its own risks. Sokal and Bricmont (1999) have demonstrated that scientists who import ideas and concepts from other disciplines into their own are more likely than those who do not to misunderstand or misinterpret crucial concepts leading to erroneous conclusions. An example of this type of erroneous conclusion would be, in my view, the use of the concept of extraversion by Naiman et al. (1978) which I have discussed at some length in this article.

As instructed SLA researchers, we have a responsibility towards the foreign language teaching community. It is therefore crucial that we ask ourselves: How could instructed SLA research be more responsive to the realities of various learner populations and to the heterogeneity in language learning experiences across individuals? How can we research L2 learning puzzles in ways that produce findings that truly serve learner-centered education? I pinpointed some of the acquisitional challenges presented to L2 users, especially those aspects of sociopragmatic and sociocultural competence that are difficult to learn within the confined space of the classroom. Although well-informed teachers and appropriate material can contribute to a raising of the learners' awareness of these aspects of the target language, L2 learners need to be aware of the gap and then decide whether or not they feel inclined to bridge it. The last leg of the learners' journey can only be unsupported. Authentic heated interactions with other users of the target language will provide ample opportunity to learn what could not be taught.

I fervently believe that a stronger focus on physiological, psychological, affective, and emotional issues in SLA can provide crucial theoretical insights into L2 acquisition that are now missing. It can also be a new impetus for authors of course books by assisting them with the design of better and richer materials and curricula. This collaboration between SLA researchers and foreign language practitioners will ultimately benefit the instructed L2 learner.

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NOTES

¹ Students enrolled in language departments in British universities are expected to study abroad (cf. Coleman, 1996, Evans, 1988). ² Regan (2004) and Bayley and Langman (2004) investigated this question for morphological variables in interlanguage and found that individual results in their data largely matched group patterns. They argued that it is therefore justified from an empirical and a theoretical viewpoint to report group results in studies of SLA. ³ I had originally included two independent variables (extraversion and neuroticism) and one dependent variable (lexical richness) in the design. A negative correlation emerged between extraversion and lexical richness, but no relation appeared between neuroticism and lexical richness. Given that there was no strong case to be made for a possible effect of neuroticism, I preferred to remove any reference to it. It is very possible that many more researchers in individual differences in SLA behave in similar ways. Studies with null results may be considered less exciting and are more likely to remain unpublished. However, if a case can be made for the potential effect of an independent variable, it should be investigated and reported, even if no significant effect emerges. ⁴ Path analysis is a special use of multiple regression to analyze the direct and indirect effects of variables hypothesized as causal (Cohen, 1992). ⁵ It is probably not a coincidence that the most prominent researchers on individual differences in SLA (MacIntyre, Skehan, Dörnyei, and Segalowitz, to name but a few) have degrees in psychology. ⁶ The other personality dimensions have been identified as

neuroticism, openness, agreeableness, and conscientiousness (Furnham & Heaven, 1999). 7 Dopamine is a neurotransmitter system of major importance within the brain. It is involved in a range of apparently different brain mechanisms including central control of locomotion and neural processes generating motivational behavior, mood, and emotion (Bradford, 1986). Dopamine is the immediate biosynthetic precursor of norepinephrine (the latter is also known as noradrenaline). 8 Catecholaminergic neurons control motor activity and mood (Bradford, 1986). 9 For the L2: $r(901) = .32$, for the L3: $r(647) = .43$; for the L4: $r(414) = .45$; for the L5: $r(218) = .50$; for all: $p < .0001$ (Dewaele, 2004a, p. 101).

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